

Application No. 10/510,134
Docket No. 0595-1009

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-16. (canceled)

17. (previously presented) Lighting device that comprises:

- a lightguide comprising a plate (1,12), comprising at least two opposed side edges (4,6), one face (3) of which has first irregular diffusing patterns (8) formed in the plate,

- two light sources (13,14) arranged along two opposed side edges of the plate,

- at least one third light source arranged along a third side edge of the plate,

- second irregular diffusing patterns formed in the plate crosscrossing with the first diffusing patterns,

each diffusing pattern comprising a groove (10) bordered by two strips of irregular projections and depressions,

each diffusing pattern having irregularities in surface area and depth,

the grooves of the first diffusing patterns being spaced apart at varying distances, and

Application No. 10/510,134
Docket No. 0595-1009

the grooves of the second diffusing patterns being spaced apart at varying distances.

18. (canceled).

19. (previously presented) Device according to claim 17, wherein the grooves extend in two essentially orthogonal directions (O_x, O_y).

20. (previously presented) Device according to claim 19, wherein the plate is rectangular and comprises two pairs of parallel opposed side edges, with the device comprising four light sources (13-18) arranged along the four respective side edges of the plate, where each source consists of a row of LEDs.

21. (previously presented) Device according to claim 17, wherein the light sources have different visible light emission colors or spectra, the light sources being LEDs (light-emitting diodes).

22. (previously presented) Device according to claim 17, wherein each of the sources comprises a series of LEDs of essentially white color welded to a printed circuit that surrounds the plate.

Application No. 10/510,134
Docket No. 0595-1009

23. (currently amended) Device according to claim 17
wherein the face (3) has luminance at least equal to 4,000 cd/m².

24. (currently amended) Lightguide, comprising:
a plate (1,12) having two parallel faces (2,3) and at
least two opposed side edges (4,6), with a first face (3) having
a plurality of first irregular elongate diffusing patterns (8,10)
formed in the plate, wherein,

said guide lightguide comprises second irregular
elongate diffusing patterns (9,10) formed in the plate and
crisscrossing the first diffusing patterns,

the first and second diffusing patterns comprising
grooves (10) bordered by two strips of projections and
depressions,

each groove having irregularities in depth and an
irregular transverse profile,

the grooves of the first diffusing patterns being
spaced apart at varying distances, and

the grooves of the second diffusing patterns being
spaced apart at vary distances.

25. (currently amended) Lightguide according to claim
24, comprising a first plurality of first rectilinear diffusing
patterns (8,10), parallel with each other, and a second plurality
of second rectilinear diffusing patterns that are parallel with

Application No. 10/510,134
Docket No. 0595-1009

each other, with said first diffusing patterns extending in a first direction (O_x) that is oblique, ~~preferably orthogonal~~, to the direction (O_y) of the second diffusing patterns.

26. (currently amended) Lightguide according to claim 24, ~~herein~~ wherein the first diffusing patterns and the second diffusing patterns extend over the first face (3) of the plate, with the plate comprising components that partially obstruct some grooves.

27. (currently amended) Lightguide according to claim 24, ~~herein~~ wherein the second diffusing patterns extend over a second face (2) of the plate that is distinct from and parallel to the first face (3).

28. (canceled).

29. (previously presented) Lightguide according to claim 24, wherein the grooves have a depth lying in the range of 10-30 microns.

30. (currently amended) Lightguide according to claim 24, wherein ~~the~~ each groove has an average width in the range of 20-60 microns and the average width of the diffusing patterns is in the range of 50-120 microns.

Application No. 10/510,134
Docket No. 0595-1009

31. (previously presented) Lightguide according to claim 24, wherein the diffusing patterns form a grid, with the area of the meshes of the grid decreasing in size essentially regularly and monotonically on approaching the center of the guide.

32. (canceled).

33. (previously presented) Lightguide according to claim 24, wherein the plate material is one of glass, polycarbonate, and methyl polymethacrylate.

34. (previously presented) Device according to claim 17 wherein the face (3) has luminance in excess of 1,000 cd/m².

35. (previously presented) Device according to claim 17 wherein the face (3) has luminance lying in a range from 5,000 to 20,000 cd/m².